POL 200-01: Political Analysis

Mo/Th 9:30-10:50am Bliss 031

> In-person Class 1 unit

Instructor: Daniel Bowen Pronouns: he / him / his Department: Political Science Open Office Hours: Monday and Thursday: 1:30p-3:00p or by appointment Office: SSB 240 Office Hours Location: In-person or Remote (over Zoom) To Schedule: https://calendly.com/bowend/office-hours Zoom Meeting ID for Remote Office Hours: 916 4993 7192 Passcode for Office Hours: bowen Email: bowend@tcnj.edu Phone: 609.771.2747 Preferred Contact Method for Course: Google Chat (see below)

1 Course Description

The course familiarizes students with the basic statistical, conceptual, and technical skills needed for research in political science. Topics include research design, hypothesis testing, statistical methodology common in the social sciences, and practical experience examining and analyzing quantitative data. This course provides students hands-on training with Stata, a commonly used statistical software package. Should normally be completed by the end of the sophomore year prior to taking POL 390.

2 Course Purpose

Quantitative research methods are some of the most powerful tools available to understand and influence contemporary politics. The purpose of this course is to familiarize undergraduate students with common quantitative methods frequently used in the field of political science and other social sciences like economics, sociology, psychology, and criminology. In the process, this course will train students to think objectively and critically about political issues. A large portion of the course will concern basic statistics used in the social sciences and hands-on training with Stata, a statistical software package commonly used in political research. By the end of the class, students should be equipped with the basic statistical, conceptual, and

technical skills necessary to effectively complete a quantitative research project and to act efficaciously as scholars and citizens.

POL 200 is one of Political Science's core courses. All political science majors **must receive a C grade or better** in the course to remain in the major. For more information, please see the program bulletin for Political Science, [https://polisci.tcnj.edu/academic-advising/undergraduate-bulletin/]. Students who do not meet the minimum grade threshold after a second attempt at the course will need to apply for Department approval to retake the course and stay in the major, per the Department's course repeat policy.

3 Course Learning Goals

The course meets the following learning goals set out by the Department of Political Science:

- (3) Critical Thinking: In discussions and assigned papers students will show advanced skills in critical thinking so that they may understand complex relationships and concepts, identify underlying assumptions, and dissect a scholarly text.
- (4) Original research: Students will conduct original research projects with data collection and methods of analysis characteristic of political science.
- (6) Civic life: Students will graduate prepared for professional life and civic participation in a diverse society.

The course is also designed to meet several Middle States/School of Humanities and Social Sciences learning goals: to strengthen your scientific and quantitative reasoning abilities, strengthen your ability to critique the arguments of others (and yourself), improve your ability to evaluate the validity and reliability of sources, to prepare you for participation in the civic life of your city, state, and nation, and train you to understand key political processes and institutions at all levels of government.

We will meet the College's "fourth hour" requirements by including additional learning activities that make the course more demanding, including additional at-home work and lectures.

4 Course *Required* Materials

One book is required for this class and available for purchase at the bookstore or through online sellers:

• Paul Kellstedt and Guy Whitten. 2018. *The Fundamentals of Political Science Research*. Third Edition. Cambridge University Press.

Please note that you will be asked to read research from political science journals. Journal articles will be available for FREE pdf download at the library's website (use Google Scholar): http://www.tcnj.edu/ ~library/research/index.html. Full list of articles is included at the end of the syllabus.

Stata is available for TCNJ students both through on-campus computer labs and through TCNJ's Virtual Apps portal.

5 Course *Recommended* Materials

There are many excellent resources for students and practitioners looking to learn Stata. UCLA's Institute for Digital Research and Education has wonderful modules and example Stata code. Check it out: https://www.nct.com/

//stats.idre.ucla.edu/stata/modules/. I also recommend Alan C. Acock's *A Gentle Introduction to Stata* which offers a nice, detailed look at Stata commands and procedures.

6 Course Requirements

6.1 Assessments

The course will utilize a number of assessment strategies. Four exercises will be assigned so you can practice the methods taught in class and which will utilize Stata. We will also have three timed quizzes, conducted through Canvas' Quizzes tab. In addition to Exercises and Quizzes, students will complete a research proposal with an annotated bibliography and a research project. Information about the proposal, annotated bibliography, and research project will be included on a handout later in the semester. Exercises should be submitted via Canvas' Assignments tab.

6.2 Labs

Some days our time will be devoted to lab sessions to gain familiarity with Stata, a statistical analysis and graphing program. Topics for the labs will range from practical concerns of data management in Stata to preparing professional graphics and data analysis. Since we are meeting in the computer lab this semester, our lab sessions will be mixed throughout class time. Additional lab and lecture material, as part of your "fourth-hour" work, will be delivered as pre-recorded video lectures.

6.3 Google Chat

I'd like to try something different in this class. We will be Google Chat to foster class communication and open and reproducible research. Google Chat comes with your TCNJ Google Apps Workspace account (you should see Chat features on the sidebar when you log in to the Gmail). In addition to access via the web, Google Chat also has mobile and desktop apps which you can download to your various devices. I have created two Spaces for this class - one focused on lecture, content, and discussion questions, and one for class exercises and the project. All students should have received an invite to join the workspaces. Learning and researching is too often a solitary experience but is very much enhanced by collaborative work. We will discuss how to foster a supportive and collaborative environment online during class. Please use Chat to contact me. I will also post discussion questions on the platform and part of your course grade will be based on asynchronous, online engagement (see "Points" section below).

7 Grading

- **Specifications Grading:** This class will utilize a non-traditional grading system called *specifications grading*. The goal of the grading system is to tie course grades directly to competencies learned during the course, with most assessments graded on a satisfactory/unsatisfactory basis and final course grades determined by the bundle of assignments and assessments completed successfully. The threshold I will use to determine whether an assessment is completed satisfactorily is approximately B/B+ work - in other words, work does not have to be completed perfectly for it to be accepted, but it does need largely well-done with only minor mistakes. Think of a hard line at 87% on a traditionally-graded assignment. Everything above the line passes; everything below the line does not.
- How Specifications Grading Differs from Traditional Grading: In a traditionally-graded course, your grade would be based on a weighted-average of various assessments. Students may get a 70% on

an assessment worth 10% of the final grade but get an 88% on a different assessment worth 30% of the course grade. The better performance on the more heavily-weighted item would pull up the overall student performance. In this way, points are interchangeable under the traditional system. But since there are many combinations of grades on various assessment that all result in the same final grade, the overall course grade says little about what the student has learned and accomplished in the course. Both faculty and students thus spend a great deal of effort differentiating a B+ from and A-, which can lead to frustration for both parties. In a "specs" grading system, however, points are not interchangeable. A student must successfully complete the required set of assignments/assessments to earn a final course grade. In this sense, the course will look much more like your post-collegiate employment, where employers expect that you will be able to successfully complete tasks required in the position. You may not excel at every single aspect of your job, but you will be expected to meet quality standards in every task necessary.

POL 200 is the first course in the Department's research core sequence (for political science majors). As such, the course is designed to prepare you to understand and conduct quantitative social science research. A grade of C or better indicates you are prepared to move on to POL 390, the next course in the research sequence.

- **Proficient and Advanced Levels:** Exercises and Quizzes will have material aimed at establishing *proficient* and *advanced* competency. Typically, advanced material is exactly as the title suggests the topics are advanced. They may consider complex Stata routines, showing the ability to correctly apply and extend conceptual knowledge, or engage in nuanced and sophisticated empirical analyses. Proficient level is meant to show a typical, firm competency in a given area.
- **Grade Bundles:** The final course grade is determined by type and number of assessments you satisfactorily complete. Completion of the "C" bundle but not all the elements in the "B" bundle will earn a grade in the C range. Table 1 describes the available grade bundles and what is expected at each stage.

| Bundle | Exercises | Quizzes | Proposal + | Dataset + | Project |
|--------|------------------|------------------|--------------------------|-------------|-----------------------|
| | (out of 4) | (out of 3) | Annotated Bibliography | Description | |
| А | 4 prof. / 3 adv. | 3 prof. / 2 adv. | Yes; 8 sources | Yes | Advanced criteria |
| В | 4 prof. / 1 adv. | 3 prof. / 0 adv. | Yes; 6 sources | Yes | Intermediate criteria |
| С | 3 prof. / 0 adv. | 2 prof. / 0 adv. | Yes; 4 sources | Yes | Adequate criteria |
| D | 2 prof. / 0 adv. | 1 prof. / 0 adv. | Yes; 4 sources | Yes | Limited criteria |
| F | _ | _ | Does not meet D standard | S | |

Table 1: Grade Bundles

- **Points:** Throughout the semester, students can win or lose points to raise or lower their grade. Points determine whether the student earns a plus or a minus on their bundle grade. Students can earn or lose points by:
 - Class participation and engagement will be graded through points. Students with extensive class participation, both during class periods and on Chat, who build and foster the class' intellectual community, and who listen and engage respectfully with each other will receive 3 points. Students with regular but not extensive participation but who supports the class community will receive 2 points. Students who frequently miss class or engage in only limited ways during class or through Chat will receive 1 point.
 - Attending a Politics Forum event (in person or virtually) and writing a one-paragraph reflection on the argument made by the presenter will earn one point. (Only can be earned once).

- Attending the Political Science Independent Research Showcase (PIRS)/Celebration of Student Achievement at the end of the semester and writing one question each about 5 presentations (posters or papers) is worth one point. (Can only be earned once).
- Each extra component completed beyond your grade bundle is worth 1 point:
 - Completing an additional exercise at proficient and/or advanced level
 - Completing 8 sources on the annotated bibliography (for B, C, or D bundles only)
 - Completing the research project at the level of advanced (for B, C, or D bundles)
- Each unused Mulligan is worth one point (see below).
- Students can lose points by submitting assignments late. Each assignment turned in after the due date will lose one point. See policy on Late Work for more details.

Points will impact student grades as shown in Table 2.

| Points | Grade |
|--------|----------------|
| 1-2 | Bundle grade - |
| 3-5 | Bundle grade |
| 6-7 | Bundle grade + |

Table 2: Points and Grades

- **The Loophole:** There is one way to increase your letter grade. If you earn 8 or more points, then I will raise your grade to the "minus" of the next grade level. For example, if you complete the B bundle and have 9 points but are not able to fully complete the A bundle, then you will earn an A- because of The Loophole.
- **Mulligans:** Each student will receive three "mulligans" during the semester which they can use to address problems with work that did not meet satisfactory threshold at the proficient or advanced levels. Students may not use a mulligan on the research project. A mulligan can apply to either a proficient assessment or an advanced assessment, but not to both. Students will have two weeks after receiving their grade for an assessment to use their mulligan and submit the revised work. If using a mulligan on a quiz, students should expect to receive at least some, perhaps even all, new questions. Multiple mulligans cannot be used on the same assessment (e.g., retaking the advanced portion of a quiz *two* times).
- A Note about Compliance with the Final Examination Policy: This grading system is different! However, it is designed to comply with The College's Final Examination Policy. The project functions as the course's final evaluation, and it is due during the class' scheduled final examination period (TBA). The project also "counts" between 15% and 35% of your course grade, even though the grading system does not use weighted points for assessments. It is not possible to pass the course with a grade higher than a D, so the assessment is certainly worth more than 15% of your final course grade. However, your final grade is dependent on your performance across the range of assessments listed in Table 1, so it is not worth more than 35% of your grade.

8 Course Policies

8.1 Adherence to TCNJ classroom policies

This course will follow TCNJ's general classroom policies. You can familiarize yourself with these policies here.

8.2 Commitment to Diversity, Equity, Inclusion, Access and Belonging

The TCNJ community is composed of people with diverse backgrounds, perspectives, and experiences, and the college is committed to diversity, equity, inclusion, access and belonging. The college's Campus Diversity Statement can be viewed here.

8.3 Late Work

I will accept work up to one week after an assignment's due date. *I will not accept any work that is more than one week late unless you speak with me about an extension (and I grant one).* An assignment submitted after the deadline but during this one-week period will result in a reduction of one point (see the item on "Points" in the Grading section) but will otherwise not impact your grade. No late work will be accepted when using a Mulligan (see Grading section).

8.4 Classroom Environment & Commitment to Student Success, Safety, and Well-being

The TCNJ community is dedicated to the success, safety and well-being of each student. TCNJ strictly follows key policies that govern all TCNJ community members rights and responsibilities in and out of the classroom. In addition, TCNJ has established several student support offices that can provide the support and resources to help students achieve their personal and professional goals and to promote health and well-being. You can find more information about these policies and resources at the "TCNJ Student Support Resources and Classroom Policies" webpage here. Students who anticipate and/or experience barriers in this course are encouraged to contact the instructor as early in the semester as possible. The Accessibility Resource Center (ARC) is available to facilitate the removal of barriers and to ensure reasonable accommodations. For more information about ARC, please visit ARC's webpage.

8.5 What are we going to do about Covid?

Here is the current plan (subject to change). If you're not feeling well, do not come to class! I'm not expecting to mandate masking in the class. But we'll see how things go during the semester and the level of transmission on campus.

When folks do get sick, which we should expect, I will make available live streaming of the course via Zoom. The live stream, however, will only be available when you let me know you need it (not enabled automatically). Here are the details:

Meeting ID: 927 0788 1193 Passcode: pol200 Link: https://tcnj.zoom.us/j/92707881193?pwd=TklyaGp4bnhDS0U4bzVqVXh5eTFnQT09

8.6 Disclaimer

The instructor reserves the right to make changes to this syllabus.

9 Class Schedule, Topics, and Readings

Week:

- 1. Introduction: a scientific study of politics? [8.31]
 - (a) Reading: None
 - (b) Practice: Stata introduction and virtual lab setup
 - (c) Assessment: None
- 2. Arguments, theories, and knowledge [9.6, 9.8]
 - (a) Reading: Kellstedt and Whitten 2018, Ch 1-3; Lee 2016, Ch 2
 - (b) Practice: Basics of data management
 - (c) Assessment: None
- 3. Research design [9.12, 9.15]
 - (a) Reading: Kellstedt and Whitten 2018, Ch 4-5; Schaffner and Roche 2016
 - (b) Practice: Descriptive statistics
 - (c) Assessment: None
- 4. Measurement and description [9.19, 9.22]
 - (a) Reading: Kellstedt and Whitten 2018, Ch 6; Jefferson 2020
 - (b) Practice: Bivariate comparisons
 - (c) Assessment: None
- 5. Bivariate comparisons and simple data visualization [9.26, 9.29]
 - (a) Reading: Kellstedt and Whitten 2018, Ch 1-2
 - (b) Practice: Delivering information using simple graphs
 - (c) Assessment: 9.29 Ex. 1 due
- 6. Statistical inference: populations, samples, and error [10.3, 10.6]
 - (a) Reading: Kellstedt and Whitten 2018, Ch 7
 - (b) Practice: More graphing: colors, opacity, titles, and text
 - (c) Assessment: 10.3 Quiz 1 (on Canvas)
- 7. Statistical inference: using the Normal and Student's t distributions [10.13]
 - (a) Reading: None
 - (b) Practice: None
 - (c) Assessment: 10.13 Proposal + Ann. Bib due
- 8. Hypothesis testing: central concepts [10.17, 10.20]
 - (a) Reading: Kellstedt and Whitten 2018, Ch 8

- (b) Practice: More data management: importing and merging datasets
- (c) Assessment: 10.17 Ex. 2 due
- 9. Hypothesis testing: three tests [10.24, 10.27]
 - (a) Reading: None
 - (b) Practice: More data management: loops and string functions
 - (c) Assessment: 10.27 Quiz 2 (on Canvas)
- 10. Covariance and Correlation [10.31, 11.3]
 - (a) Reading: Inglehart 2003
 - (b) Practice: Bivariate hypothesis tests
 - (c) Assessment: None
- 11. Introduction to linear regression [11.7, 11.10]
 - (a) Reading: Kellstedt and Whitten 2018, Ch 9
 - (b) Practice: Regression basics
 - (c) Assessment: 11.7 Ex. 3 due
- 12. Multiple regression [11.14, 11.17]
 - (a) Reading: Kellstedt and Whitten 2018, Ch 10
 - (b) Practice: Regression: prediction and tables
 - (c) Assessment: None
- 13. Dummies, interactions, and transformations [11.21]
 - (a) Reading: Kellstedt and Whitten 2018, Ch 11; Trounstine 2016
 - (b) Practice: Regression: dummy variables and interaction terms
 - (c) Assessment: None
- 14. Regression assumptions [11.28, 12.1]
 - (a) Reading: Iyengar, Sood and Lelkes 2012
 - (b) Practice: Project work
 - (c) *Assessment:* **11.28 Ex. 4 due 12.1 Quiz 3** (on Canvas)
- 15. Limitations of regression [12.5, 12.8]
 - (a) Reading: None
 - (b) *Practice:* Project work
 - (c) Assessment: 12.5 Data & Description due
- 16. TBD Final Project Submission

References

- Inglehart, Ronald. 2003. "How Solid is Mass Support for Democracy And How Can We Measure It?" *Public Opinion Quarterly* 36(1):51–57.
- Iyengar, Shanto, Gaurav Sood and Yphtach Lelkes. 2012. "Affect, Not Ideology: A Social Identity Perspective on Polarization." *Public Opinion Quarterly* 76(3):405–431.
- Jefferson, Hakeem. 2020. "The Curious Case of Black Conservatives: Construct Validity and the 7-point Liberal-Conservative Scale." *SSRN Electronic Journal*.
- Kellstedt, Paul M and Guy D Whitten. 2018. *The fundamentals of political science research*. Third ed. Cambridge University Press.
- Lee, Frances. 2016. *Insecure majorities: Congress and the perpetual campaign*. Chicago London: The University of Chicago Press.
- Schaffner, Brian F and Cameron Roche. 2016. "Misinformation and motivated reasoning: Responses to economic news in a politicized environment." *Public Opinion Quarterly* 81(1):86–110.
- Trounstine, Jessica. 2016. "Segregation and Inequality in Public Goods." *American Journal of Political Science* 60(3):709–725.